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Minerals, Multiple Use, and You!

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Minerals, Multiple Use, and You

Our human civilization is highly dependent upon minerals and fossil fuels extracted from the earth—from the common metals such as iron, copper, tin, lead, and molybdenum to rare and precious metals such as titanium, platinum, gold, and silver; from minerals such as uranium, phosphates, gypsum, and silicon; from precious gems to building stone, gravel, and sand, to coal, oil, and gas.

If these materials were to become unavailable, our present way of life could not continue. For example, without phosphate fertilizers, metal tools, cans and glass containers, and energy, our vast food production and distribution system would not be possible. As our society becomes more and more complex, it has created a much greater need for minerals, metals, and fuels.

Energy and mineral resources provide the foundations of the American industrial base and are important to our country's economic and national security. Although imports can satisfy a part of our needs for minerals and energy, if we depend heavily on other countries' resources, we become vulnerable to the economic and political decisions of foreign countries. Thus, wise use and conservation of the mineral deposits within the United States are vital to this country's well being.

Most lands are valuable for more than the mineral resources in them. We need land for farming and silviculture, for building homes and factories, for recreation, for preservation as wilderness, and for many other activities. Thus, obtaining land for mining operations is becoming more difficult.



The National Forest System

The 156 national forests, 19 national grasslands, and 16 land utilization projects represent 191 million acres of Federal land and are an important part of our Nation's natural resource base. They are located in 44 States, Puerto Rico, and the Virgin Islands. These National Forest System lands include a wide diversity of geological features and biological systems: mountains, glaciers, forests, deserts, range and grasslands, lakes, streams, and tropical and temperate rain forests.

The natural resources on these lands represent some of the Nation's greatest assets and have major economic, environmental, and social significance for Americans. These resources are managed for a variety of purposes, including maintaining watershed health, preserving habitat for wildlife and plants, timber production, recreational use, grazing range animals, and mineral extraction.



FOREST SERVICE MINERALS PROGRAM POLICY



The availability of mineral and energy resources within the National Forests and Grasslands significantly affects the development, economic growth, and defense of the Nation. The mission of the Forest Service in relation to minerals management is to encourage, facilitate, and administer the orderly exploration, development, and production of mineral and energy resources on National Forest System land to help meet the present and future needs of the Nation.

The Forest Service administers its mineral program to:

1. Encourage and facilitate the orderly exploration, development, and production of mineral and energy resources within the National Forest System in order to maintain a viable, healthy minerals industry and to promote self-sufficiency in those mineral and energy resources necessary for economic growth and the National defense.
2. Ensure that exploration, development, and production of mineral and energy resources are conducted in an environmentally sound manner and that these activities are integrated with the planning and management of other National Forest resources.
3. Ensure that lands disturbed by mineral and energy activities are reclaimed for other productive uses.

The Forest Service policy is to:

1. Process mineral applications, operating plans, leases, licenses, permits and other use authorizations in an efficient and timely manner.
2. Ensure the integration of mineral resource programs and activities with the planning and management of renewable resources through the land and resource management planning process, recognizing that mineral development can occur concurrently or sequentially with other resource uses.
3. Plan and provide for access to and occupancy of National Forest System lands for mineral resource activities, consistent with the overall management objectives and the rights granted through statutes, leases, licenses, and permits. Eliminate or prevent occupancy that is not reasonably incident to and required for mineral operations.
4. Prior to applying for the administrative withdrawal of National Forest System lands from mineral entry, ensure the consideration of (a) the National interest in strategic and critical minerals, (b) the value of the mineral resource foregone, and (c) the value of the resource or improvement being protected.
5. Ensure that valid existing rights have been established before allowing mineral or energy activities in congressionally designated or other withdrawn areas.
6. Coordinate and cooperate with other Federal and State agencies having authority and expertise in mineral-related activities.
7. Maintain an effective professional, technical, and managerial work force that is knowledgeable in mineral exploration and development.
8. Ensure the uniform application of exploration, development, and reclamation standards.
9. Require a reclamation plan for all mineral exploration and development proposals that would create environmental disturbance, to return the land to other productive uses consistent with land and mineral management goals.

Mineral Resources of the National Forest System

Geologically, the National Forest System lands contain some of the most favorable host rocks for mineral deposits in the United States. We already know of about 6.5 million acres underlain by coal reserves and 300,000 acres with phosphate resources. Significant deposits of other mineral resources have been found on national forests. Between 1960 and 1985, about 140 major mineral deposits were discovered in the world. More than 50 of these are on public lands in the United States, and about 20 are on the National Forest System. World-class deposits of lead/zinc, molybdenum, silver/copper, and gold have been found on National Forest System lands.

The richest and most easily mined mineral deposits are always used first. As these become depleted, we must turn to other deposits. In many instances, these mineral resources are of low grade or are located in remote areas where exploration and development are impeded by forbidding terrain and harsh climatic conditions. However, new technologies for discovering and extracting mineral resources as well as increased demand and higher prices have spurred U.S. industries into expanding their prospecting, exploration, and development of previously unexplored areas and have enabled them to develop mineral resources that were once uneconomical.

The energy shortage this country faced a few years ago reminds us that our reserve of mineral resources is limited. As with oil supplies, there will undoubtedly be a considerable tightening of world supplies of some minerals. Such a trend is leading to expansion of domestic mineral prospecting, exploration, and development. Much of this expansion is taking place on the national forests, where the majority of the land is open to these mineral activities.

Forest Service Responsibilities

The Forest Service, as one of the agencies responsible for Federal land management, has a responsibility to ease U.S. dependency on foreign mineral supplies by facilitating mineral and energy development within the National Forest System yet maintaining harmony with other resource values and uses.

The agency is dedicated to multiple-use management of these lands for sustained yields of renewable resources. Under this management concept, the best combination of uses benefits the American people and assures the productivity of the land and quality of the environment for present and future generations.

Although not renewable, minerals are important resources of the national forests. In fact, they are vital to the Nation's welfare. By accident of geography and geology, the National Forest System contains much of our country's remaining stores of minerals—prime examples being the national forests in the Rocky Mountains, the Basin and Range Province, the Cascade-Sierra Nevada Ranges, the Alaska Coast Range, and the States of Missouri, Minnesota, and Wisconsin. Lesser known but good mineral potential exists in the southern and eastern national forests.

These same lands, however, also contain valuable nonmineral resources, including wildlife, timber, forage, water, scenic landforms, and wilderness. Public holdings of such nonmineral resources are currently among the most significant in the world.

Minerals Management in the Forest Service

In the Mining and Minerals Policy Act of 1970, Congress declared that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise (among other goals) in the development of domestic mineral resources and the reclamation of mined land. This Federal policy obviously applies to National Forest System lands.

The Forest Service recognizes the importance of National Forest System mineral resources to the well-being of the Nation and encourages bona fide mineral exploration and development. But it also recognizes its responsibilities to protect the surface resources of the lands under its care. The Forest Service minerals management program focuses on land availability, timely response to industry proposals, coordination with other values, and the reclamation of disturbed land.

Land Management Planning

Land management planning, as mandated by the National Forest Management Act of 1976, is an essential tool for management of the national forests. The implementing regulations assure that mineral resources are given proper consideration. Before plans are developed, specialists gather mineral resource information from several sources, including the U.S. Geological Survey and the Bureau of Mines, to use in forecasting probable mineral opportunities and activities. Planners and decisionmakers then formulate plans to minimize potential conflicts and maximize the various uses and values of the lands. Each plan integrates minerals management into the day-by-day operations of the Forest Service. The plans establish standards for systematic and orderly development of minerals operations, performance checks, public health and safety, environmental protection, and reclamation of disturbed lands. Since minerals are usually hidden and relatively rare, the land management planning procedures provide for flexibility and availability of minerals activities where possible.

Minerals management on National Forest System lands also requires interagency coordination and cooperation. Although the Forest Service is responsible for the management of the surface resources, the Bureau of Land Management is primarily responsible for man-



agement of Government-owned minerals. Since it is impossible to divorce mineral operations from surface management, the agencies have developed cooperative procedures to accommodate their respective responsibilities.

Reclamation

Reclamation is the process of returning disturbed land to suitable production and use. Reclamation goals include reshaping the land, enhancing vegetative cover, and maintaining water quality and wildlife habitat.

Forest Service research centers at Berea, KY, and the Intermountain and Rocky Mountain Forest Range and Experiment Stations conduct research and develop new methods for the reclamation of mined land. These centers work with National Forest administrators, State Governments, and private industry on a variety of projects reclaiming arid lands, high-elevation sites, large strip mines, and oil and gas drill sites.

Today, we must solve worldwide material shortages and increasing energy demands while maintaining a high-quality environment. The United States is gradually becoming dependent upon others for raw materials vital to its economy and well-being.

New technology and cooperation will help meet the challenges of the future. Your National Forest System will continue to play a major role in the development of our Nation, through "Minerals, Multiple Uses, and You."

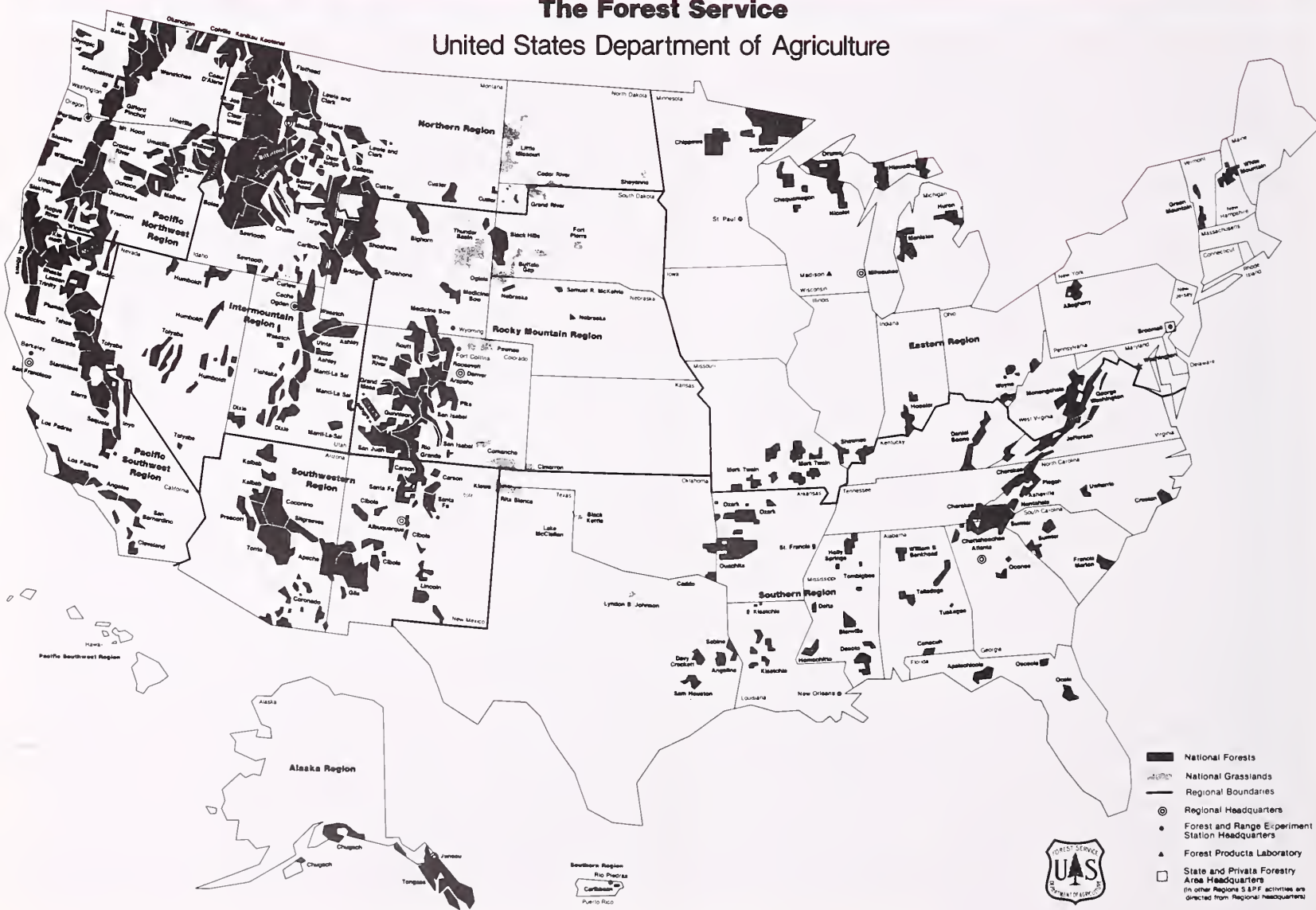






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